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ABSTRACT

For 20 years, Federal law has mandated that low achieving children residing in low income areas receive supplemental services regardless of whether they attend public or nonpublic schools. Yet Chapter 1 participation rates have always been lower for nonpublic school children than they have for public school children. School size and problems of definition are two factors that account for this difference. This study, which examined the 39 larger districts in Massachusetts, explores the resulting variability after taking size and definitional problems into account. Among the conclusions are the following: (1) the absolute size of the Chapter 1 grant to a district appears to be a strong predictor of nonpublic school participation; (2) there is a strong correlation within districts between participation rates for public and nonpublic schools; (3) the same criteria for determining eligibility for Chapter 1 programs are used for students enrolled in public and nonpublic schools; (4) coordinators and nonpublic school principals viewed the relationship between the Chapter 1 program and the nonpublic schools as excellent; (5) having too few eligible students within a school was a problem faced more by out-of-district than within-district nonpublic schools; (6) the best measure of participation rate is the number of participants as a percentage of low-achieving Chapter 1 attendance area residents in participating schools. The characteristics of Chapter 1 students attending public and nonpublic schools are discussed. Tables and figures illustrate the data. Data sources are listed in an appendix. (BJV)

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CHAPTER 1 AND NONPUBLIC SCHOOLS:
DO STUDENTS HAVE EQUAL ACCESS?

THE MASSACHUSETTS CASE

FINAL REPORT

MARY ANN MILLSAP

July 15, 1985

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EXECUTIVE SUMMARY

CHAPTER 1 AND NONPUBLIC SCHOOLS: DO STUDENTS HAVE EQUAL ACCESS?

THE MASSACHUSETTS CASE

By

MARY ANN MILLSAP

Do students in nonpublic schools have equal access to Chapter 1 services? For twenty years, federal law has mandated that low achieving children residing in low income areas be provided supplemental services regardless of whether children attended public or nonpublic schools. Yet participation rates for nonpublic school children have always been lower than for public school children. In 1979-1980, for example, approximately 5 percent of the students in nonpublic elementary and secondary students received Title I services compared to 13 percent of the public elementary and secondary students (Jung, p. xiii).

What accounts for this difference? Size is one factor: where nonpublic schools are widely dispersed or enroll few students, nonpublic school students are less likely to be enrolled. Problems of definition are another factor. Participation rates are defined as the number of participants divided by total enrollment. This definition is valid only if equal proportions of public and nonpublic school children live in low income areas and are low achieving. These data are not easily accessible; in fact, nonpublic schools are not required to provide information on achievement levels of their students.

But most of the difference is unexplained. The most recent research said data were inconclusive as to why some eligible nonpublic students were not receiving services (Jung, p xiv).

RESEARCH QUESTIONS AND DESIGN

This research study is designed to explain the variability left over after taking size and definitional problems into account. By concentrating on the 39 larger districts in Massachusetts, where more than one fifth of all school children enroll in nonpublic schools, sufficient numbers of children should be residentially eligible for Chapter 1 programs to overcome barriers of logistics. After limiting the definition of participation rates to those students living in low income areas (and defined as Chapter 1 attendance areas), we can then examine whether discrepancies in participation persist and, if so, systematically explore what factors account for them.

This study addresses two research questions:

1. Is there a discrepancy within Massachusetts' larger school districts in the participation rates between public and nonpublic school children in Chapter 1 programs?

2. If so, what factors appear to account for the discrepancy?

Document Sample. Chapter 1 program applications were reviewed for all school districts enrolling 5,000 or more public school students plus seven additional smaller districts (enrolling between 2,500 and 5,000 students) with large concentrations of Chapter 1 students. Application data were augmented with information in Massahcusetts Schools, the state-compiled directory of all schools in Massachusetts.

Interview Sample. In Chapter 1 law, the equal access provisions apply on a within-district basis. A purposive sample of 10 districts with marked differences in participation rates was chosen. Interviews were conducted with Chapter 1 coordinators and nonpublic school principals to understand the basis for the discrepancy.

Two groups of districts were chosen. In the first group, called the "public" districts in this study, the relative percentage of public enrollment is at least 50 percent more than the relative percentage of nonpublic school enrollment in Chapter 1 programs. In the second, called the "nonpublic" districts, the relative percentage of nonpublic enrollment is at least 30 percent more than that for public school enrollment (there were no districts with a 50 percent differential).

A PROFILE OF NONPUBLIC SCHOOLS AND CHAPTER 1 PROGRAMS

The 39 larger districts in Massachusetts enroll some 360,000 public school students, 40 percent of the state total, and 96,000 nonpublic school students. Enrollment in nonpublic schools account for 21 percent of total school enrollment. The 39 districts receive over $53 million for Chapter 1 programs, some 74 percent of the total state appropriation.

Within these districts are located some 215 nonpublic elementary schools and 40 nonpublic high schools. Sixty-three percent of the elementary schools have Chapter 1 programs, while 25 percent of the nonpublic high schools participate. Of all participating schools, all but 7 are located within school district boundaries. Also, 98 percent of the participating schools are Catholic schools, while some 39 percent of the nonparticipating schools are Catholic.

Some patterns emerge from cross-district comparisions of nonpublic school participation in Chapter 1. The absolute size of the Chapter 1 grant appears a strong predictor of nonpublic school participation (if nonpublic options are available). For high participation nonpublic districts, the average grant was $2.91 million, while for the low participation nonpublic districts the average grant was only two-fifths as large or $1.1 million. In addition, the more nonpublic students in a district, the higher the

participation rates, although the addition of a few students in the districts with few students alters that picture dramatically. There also appears to be a relatively strong correlation within districts between participation rates for public and nonpublic schools. That is, high participation rates for nonpublic schools are associated with high participation rates for public schools, and low nonpublic rates are associated with low public rates of participation. This may reflect programmatic decisions about how to concentrate Chapter 1 resources. Lastly, the districts that have no programs for nonpublic students all have less than 10 percent of total enrollments in nonpublic schools, and either have a low incidence of poverty or have no nonpublic schools enrolling low achieving students.

DO PROGRAM APPLICATIONS SHOW A DISCREPANCY BETWEEN PUBLIC AND NONPUBLIC SCHOOL STUDENT PARTICIPATION IN CHAPTER 1 PROGRAMS?

For this study, participation rates were defined as the number of participants divided by the number of students living in Chapter 1 attendance areas (and within the district Chapter 1 program's grade spans). Aggregating data across the 39 districts, public school students are somewhat more likely to participate in Chapter 1 (at 23%) than nonpublic school students (at 19%). If total enrollment figures were used as the denominator rather than residents in Chapter 1 attendance areas, as typically used for national comparisons, the participation rate would be 14 percent for public school students and 9 percent for nonpublic school students.

We will return to participation rates later in this summary, after assessing the strength of the factors influencing the participation rate and refining the denominator to include only adademically eligible students.

WHAT FACTORS ACCOUNT FOR THE DISCREPANCY IN PARTICIPATION RATES?

Do nonpublic schools have the same proportion of students meeting the educational achievement requirements for Chapter 1 programs? Nonpublic schools enroll proportionately far fewer low achieving students than public schools. Among nonparticipating schools located within district boundaries, 54 percent either had admissions requirements or enrolled no (or probably no) low achieving students, according to school principals. Of the 26 nonpublic high schools in the districts with Chapter 1 high school programs, 21 do not participate. All but one of these has admission requirements.

Among participating schools, what are the waiting lists for public and nonpublic schools? Among the 28 principals of participating nonpublic schools, 26 said there were no waiting lists. One thought they could accomodate an additional 20 students, and another thought they could serve "a few 10th graders" in a program now serving only 9th graders. These two districts were both "public" districts.

For waiting lists among public schools, Chapter 1 coordinators were asked for their best estimate of waiting lists. According to the Chapter 1 coordinators in the 6 "public" districts, one served

virtually all students, one thought there weren't many on the waiting list, the third mentioned small waiting lists for some schools, and the fourth said there was a waiting list only for the junior and senior high school programs. No information was available for the remaining two districts.

For the 4 "nonpublic" districts, one had a very small waiting list, another noted 25 students were on the list (5 percent of those eligible), while the third thought some 85 to 90 percent of eligible students were served (this would translate into a waiting list of roughly 200 public school students for the district). In the fourth and most urban district, some 12.5 percent of the eligible elementary school children, 21 percent of the junior high school students and 44 percent of the eligible high school students are on waiting lists. Over 3,000 public school students are on waiting lists for Chapter 1 programs. It appears in the most urban setting that poverty and low achievement are compounding: the largest concentrations of poverty have higher percentages of low achieving students. While allocating funds based on the number of children in poverty works fairly well for most districts so that virtually all low achieving children in low income areas are served, the allocation does not encompass all eligible children in the most urban areas.

Do school districts contact all the nonpublic schools that Chapter 1 attendance area students attend? The most urban district restricts nonpublic schools to those located in Chapter 1 attendance areas. This policy has been in effect since 1970 and is seen by nonpublic school principals interviewed as a "given." Two other districts may also restrict schools to those located in eligible attendance areas, although their policies were not clear cut. A total of 15 nonparticipating schools are located in ineligible attendance areas, 13 in the most urban district. It is unknown how many Chapter 1 residents attend these schools in the most urban district; in the other districts, an estimated 10 academically eligible Chapter 1 residents are involved.

Three of the four largest school districts do not contact nonpublic schools outside district boundaries. No information was available on the fourth district. Smaller districts do contact out-of-district schools, and three support out-of-district programs, all in Catholic schools whose parish boundaries encompass part of the school district. Coordinators reported that few elementary school students attend out-of-district schools, and that high school students were more likely to go out-of-district and then to one of the "exam" high schools.

Do nonpublic and public school Chapter 1 programs cover the same grade spans? In four of the six "public" districts, the grade spans covered by the public school Chapter 1 programs exceeded those covered by the nonpublic school programs, while in the four "nonpublic" districts, Chapter 1 grade spans were identical. Differences in grade span coverage appear related to characteristics of nonpublic schools. In the three districts with no corresponding high school program, the nonpublic high schools either had admission

requirements or no low achieving students. In addition, several nonpublic elementary schools have chosen not to include upper grades (6th-8th) for Chapter 1 services, noting scheduling was too chaotic and teachers had recommended the program be discontinued. The absence of pre-kindergarten and near absence of kindergarten programs in two districts' nonpublic schools appears related to availability. In one district, only two of the four nonpublic schools had a kindergarten program. Also, almost all Catholic elementary schools administer a reading-readiness tests. If students score too low, parents are encouraged to reapply the following year.

Are the same (or equivalent) criteria used for determining educational eligibility for Chapter 1 programs? Massachusetts requires all Chapter 1 programs to use multiple criteria in selecting students for programs. The most urban district uses only percentile rankings on standardized tests and previous enrollment, while the remaining districts use additional criteria, such as teacher recommendation, ranking in the lowest quartile in the class, held in grade one or more years, and grades of D or F in major subjects. The same criteria and point system are used for students enrolled in public and nonpublic schools. The main distinction in criteria between public and nonpublic schools was in the use of different standardized achievement tests for initial selection, although a number of districts tests all recommended students with the same test as used with public school students. Whether the use of different tests results in differential initial selection of students is difficult to ascertain. Eligible students usually meet all criteria used--including such factors as failing grades and low classroom rankings--so it is unlikely students would be excluded who were just above the 40th percentile.

Do nonpublic schools agree to allow their students to participate in Chapter 1? Very few nonpublic schools chose not to have their students participate in Chapter 1 programs. In four of the districts (two "public" and two "nonpublic"), a total of five nonpublic schools chose not to participate. Two Christian schools did not want to "jeopardize our philosophy" or "compromise our freedom of religion." About 25 Chapter 1 residents attended these schools; it is unknown whether any were low achieving. Another Christian school was hiring their own person to work with their 25-30 low achieving students. In addition, one Catholic high school and one Catholic junior high school stopped participating several years ago. The high school was dissatisfied with their lack of control over the program, while the junior high school withdrew because of difficulties in managing the daily scheduling of students. Several of the Catholic elementary schools do not have Chapter 1 programs for 6th through 8th graders due to scheduling problems.

Is the nature of the relationship between the public and nonpublic schools cooperative? With two or three exceptions, coordinators and nonpublic school principals viewed the relationship between the Chapter 1 program and the nonpublic schools as excellent. Principals thought the teachers excellent and hardworking. Staff were described as extremely dedicated, accomodating, generous with their time, and open and flexible.

Nonpublic school principals seemed as involved with the program as they wanted to be, which outside of their own school was generally very little. Nonpublic school principals focused on their own school's issues and found the Chapter 1 program personnel open, receptive and accomodating to their concerns. In a few cases, principals would contact the Chapter 1 office office about starting a new subject matter or grade level, but for the most part programmtic shifts were initiated by the Chapter 1 office. The three exceptions to cooperative relations were with the principal of a nonpublic school with a new program and with principals of two nonparticipating schools who considered the Chapter 1 program nonresponsive to their students' needs. One school was located out of the district, while the other was located in an ineligible attendance area (though the policy on attendance areas was not all that clear).

Do nonpublic school personnel perceive Chapter 1 as a program their students whould have equal access to? Participating principals see Chapter 1 as a program for their students. Both Archdioceses encourage them to take advantage of federal programs (and all participate in Chapter 2 as well), and Chapter 1 is usually the only extra service program the school has. They are heavily invested in the program.

Nonparticipating schools fell into two groups: the schools with admissions requirements, very high tuitions, very few Chapter 1 students, and/or Christian schools who didn't feel the program was for them; and schools who knew they were entitled to the program but either chose not to participate, had no students below the 50th percentile, or were the two schools who had sought services but had yet to receive them.

Are sufficient numbers of eligible children attending a nonpublic school to warrant providing Chapter 1 services to those students? Having too few eligible students within a school was a problem faced more by out-of-district schools than within-district schools. There was only one instance where an out-of-district school had more than 5 eligible students. Some 10 nonparticipating within-district schools have very few Chapter 1 residents and didn't participate for multiple reasons. Five had no low achieving students, four were Christian schools (and two had no low achieving students), and three were very small schools (each enrolling less than 70 students total).

Chapter 1 coordinators reported no fixed minimum number of students needed to provide services to a nonpublic school. It appears that having 10 students generally warrants someone on site, and the smallest program had 10 students. With fewer students, nonpublic schools would be asked to transport students to the nearest Chapter 1 school. The smallest on-site service number quoted was for 5 students in a small district with a large concentration of eligible students.

CONCLUSIONS

If public and nonpublic school participation in Chapter 1 programs are compared using either participants as a percent of total enrollment or participants as a percent of Chapter 1 residents, nonpublic schools have lower participation rates. But these two are both proxy participation rates: the true participation rate would be the number of participants as a percent of low achieving Chapter 1 residents. Summarizing the impact of the factors on the participation rate leads to a good estimate of the true participation rate.

What can be said about Chapter 1 residents who are enrolled in nonparticipating schools? (a) If they are attending nonpublic schools located within the district, they are not likely to be low achieving. Over half of the nonparticipating schools enrolled no low achieving students. (b) Few Chapter 1 residents are enrolled in the 6 nonpublic schools that chose not to participate, and it's not clear whether they are low achieving. (c) An unknown number of Chapter 1 residents attend nonpublic schools located in ineligible attendance areas. All but 10 of these students live in the most urban district. At the moment, some 3,000 students are on waiting lists in the public schools there, while the participating nonpublic schools interviewed had no waiting lists. Adding the currently ineligible schools to the program would not alter the imbalance in participation rates that favors nonpublic schools. (d) No students are excluded from participation because of uncooperative relationships between the program and nonpublic schools, and nonpublic schools with eligible students are invested in participating. In the two cases where concerns about the program included students not being served, 10 are listed above (under ineligible attendance areas), and the other 17 are counted under out-of-district students below. (e) For Chapter 1 residents attending school outside the district, those served are enrolled in Catholic schools whose parish boundaries overlap with the district. It is not clear whether other out-of-district students are low achieving. According to Chapter 1 coordinators, they are most likely to be high school students enrolled in "exam" high schools. From this analysis, it seems that few Chapter 1 residents enrolled in nonparticipating schools would be eligible for Chapter 1 services.

What can be said about Chapter 1 residents enrolled in participating schools? Some 26 of the 28 nonpublic school principals interviewed said there were no waiting lists for Chapter 1 in their schools. The other two principals thought they would accommodate 20 students and "a few," respectively. One could argue then that all eligible students within the participating nonpublic schools are served, provided that the same criteria are used in public and nonpublic schools for initial selection. Different achievement tests are used in these districts, but the use of multiple criteria more likely expands the selection pool and mutes the effects of bias in different tests.

Following this analysis, one could posit that a more accurate proxy measure of the true participation rate would be to use the number of participants as a percent of low achieving Chapter 1 attendance areas residents in participating schools. Table A presents four different definitions of participation rates--participants as percent of total enrollment, as percent of Chapter 1 area residents, as percent of Chapter 1 residents in participating schools and as a percent of low achieving Chapter 1 residents in participating schools. While the first two show a discrepancy favoring public school participation in Chapter 1, the last two indicate that low achieving Chapter 1 residents in nonpublic schools are more likely to be served than their public school counterparts. For the most urban district, eligible Chapter 1 residents are much more likely to be served in nonpublic than in public schools.

TABLE A. CHAPTER 1 PARTICIPATION RATES FOR PUBLIC AND NONPUBLIC SCHOOL STUDENTS: REFINING THE DENOMINATOR (MASSACHUSETTS 39 LARGER DISTRICTS)

DENOMINATOR	PUBLIC SCHOOL PARTICIPANTS DIVIDED BY DENOMINATOR	NONPUBLIC SCHOOL PARTICIPANTS DIVIDED BY DENOMINATOR
TOTAL ENROLLMENT	14%	9%
CHAPTER 1 ATTENDANCE AREA RESIDENTS	23%	19%
CHAPTER 1 ATTENDANCE AREA RESIDENTS IN PARTICIPATING SCHOOLS	23%	27%
ELIGIBLE CHAPTER 1 ATTENDANCE AREA RESIDENTS IN PARTICIPATING SCHOOLS (10 Selected Districts)	~90-~95%	100%

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MARY ANN MILLSAP

INTRODUCTION AND RESEARCH QUESTIONS

Do students in nonpublic schools have equal access to Chapter 1 services? For twenty years, federal law has mandated that low achieving children residing in low income areas be provided supplemental services regardless of whether children attended public or nonpublic schools. Yet participation rates for nonpublic school children have always been lower than for public school children. In 1979-1980, for example, approximately 5 percent of the students in private elementary and secondary students received Title I services compared to 13 percent of the public elementary and secondary students (Jung, p. xiii).

What accounts for this difference? Some relates to issues of size: where nonpublic schools are widely dispersed or enroll few students, as in the West and Southwest regions of the country and in smaller districts everywhere, nonpublic school students are less likely to be enrolled. Part of the variability also rests with problems of definition. Participation rates are defined as the number of participants divided by total enrollment. This definition is valid only if equal proportions of public and nonpublic school children live in low income areas and are low achieving. These data are not easily accessible; in fact, nonpublic schools are not required to provide information on achievement levels of their students.

But most of the variability is unexplained, and data from the most recent research were inconclusive as to why some eligible nonpublic students were not receiving services (Jung, p xiv).

This research study is designed to explain the variability left over after taking size and definitional problems into account. By concentrating on the larger districts in Massachusetts, where more

than one fifth of all school children enroll in nonpublic schools, sufficient numbers of children should be residentially eligible for Chapter 1 programs to overcome barriers of logistics. After limiting the definition of participation rates to those students living in low income areas (and defined as Chapter 1 attendance areas), we can then examine whether discrepancies in participation persist and, if so, systematically explore what factors account for them.

This study addresses two research questions:

1. Is there a discrepancy within Massachusetts' larger school districts in the participation rates between public and nonpublic school children in Chapter 1 programs?

2. If so, what factors appear to account for the discrepancy?

Discrepancies in participation rates may be accounted for by a number of factors, including whether (a) nonpublic schools have the same proportion of low achieving students (usually indicated by multiple criteria, including ranking at or below the 40th percentile on standardized tests); (b) school districts contact all the nonpublic schools that Chapter 1 attendance area students attend, (c) nonpublic and public school offerings cover the same grade spans, (d) the same (or equivalent) criteria are used for determining educational eligibility for Chapter 1 programs, (e) nonpublic schools agree to allow their students to participate in Chapter 1 programs, (f) the nature of the relationship between the public and nonpublic schools is cooperative, (g) nonpublic school personnel perceive Chapter 1 as a program their students should have equal access to, and (h) there are sufficient numbers of eligible children attending a nonpublic school to warrant providing Chapter 1 services to those students.

This study addresses the extent to which these factors (or others that arose during the study) appear to account for the within-district discrepancies in Chapter 1 participation between eligible children attending nonpublic and public schools in Massachusetts' larger cities.

The study was divided into two phases: (1) review and analysis of districts' Chapter 1 program applications in the State Department's Chapter 1 office and other statistical data on public and nonpublic schools in Massachuetts, and (2) interviews with district Chapter 1 directors and the principals of nonpublic schools in selected sites. The first phase explores patterns of participation across the 39 largest districts in Massachusetts, while the second phase concentrates on 10 districts with marked differences in the proportions of Chapter 1 area residents served in public and nonpublic Chapter 1 programs. The paper will report on each phase in turn, detailing the methods used and the results found.

PHASE 1: THE OVERALL PATTERN OF NONPUBLIC SCHOOL PARTICIPATION IN MASSACHUSETTS

Applications were reviewed for all school districts enrolling 5,000 or more public school students (32 districts) plus seven additional smaller districts (enrolling between 2,500 and 5,000 students). The larger school districts in Massachusetts have larger proportions of students attending nonpublic schools than the smaller districts. The smaller districts that were added have large concentrations of Chapter 1 students (that is, the Chapter 1 grant for the district averages more than $100 for each public school student, a proxy measure used to identify high density Chapter 1 districts). Program application data were augmented with information in Massachusetts Schools, the annual directory of all elementary and secondary schools in Massachusetts. A description of document sources appears in Appendix A.

To explore patterns of nonpublic school participation in Chapter 1, three analyses of information from these state documents were made: a profile of nonpublic schools across the larger districts, the distribution of nonpublic school children in schools within and outside the school district, and lastly, district by district comparisons of nonpublic school Chapter 1 participation.

A PROFILE OF NONPUBLIC SCHOOLS AND CHAPTER 1 PROGRAMS

The 39 selected school districts in Massachusetts enroll some 455,875 public and nonpublic school children. Enrollment in nonpublic schools accounts for 21 percent of this total. The 96,251 nonpublic school students enrolled in the selected districts account for 63 percent of the state's total nonpublic school children. For the purposes of this research, a smaller number will be used as the total nonpublic school enrollment. All nonpublic nursery and nursery/kindergarten schools and all special education schools are excluded since children in these schools would not be enrolled in grade spans covered by regular Chapter 1 programs. Roughly 23,600 students attend these schools. For the most part these schools are quite small, although they account for almost half (46 percent) of the nonpublic schools in the selected districts. With these schools (and children) excluded, the total nonpublic school enrollment in the selected districts becomes 72,651. The 359,624 public school children comprise slightly more than 40 percent of all public school students in Massachusetts. These 39 school districts will receive over $53 million in FY 85 for Chapter 1 programs, some 74 percent of the state's appropriation.

A distinction must be made between nonpublic school enrollments in a given district and the number of nonpublic school children residing in that district. Nonpublic school children have no

residence limitation on their choice of schools, whereas public school children, for the most part, attend neighborhood schools. The nonpublic schools are usually nearby since most are day schools, but they need not be located within public school district boundaries. Likewise, nonpublic school enrollments in a given district may include students from neighboring districts as well. Most nonpublic elementary school children appear to attend nonpublic schools in the school district of residence, but not all of them do. Nonpublic high school students are more likely than elementary school students to attend out-of-district schools. One needs to keep the residential differences in mind when comparing the data on the number of nonpublic school children residing in a district and the number enrolled in schools located in that district.

Table 1 on the following page presents the aggregated enrollment data for public and nonpublic schools and by Chapter 1 attendance areas. Two discrepancies are immediately apparent in the table. The first is that a smaller proportion of nonpublic school children reside in Chapter 1 attendance areas than public school children. Some 48 percent of nonpublic school children live in Chapter 1 attendance areas and therefore meet the residential requirement for participation, compared to some 60 percent of the public school children. The percent of nonpublic school children to all school children residing in Chapter 1 attendance areas is 13.8 percent, about one-fifth less than the district-wide percentage. In short, fewer children living in poverty areas attend nonpublic schools than those living in more affluent parts of school districts.

The second discrepancy centers on the Chapter 1 participation rates for those public and nonpublic school children who live in Chapter 1 attendance areas (and, as we noted earlier, are within the program's grade spans). All other things being equal, the participation rates of public and nonpublic school students should be the same within a school district, but the aggregated data across districts show public school students are somewhat more likely to participate in Chapter 1 (at 23.1%) than nonpublic school students (at 19.2%). This is a smaller discrepancy than we would obtain using the total enrollment figures customarily used in research on participation in Chapter 1. Had we used the total enrollment figures, the participation rate would be 14 percent for public school students and 9 percent for nonpublic school students.

<u>How many nonpublic schools house Chapter 1 programs?</u> Some 215 nonpublic elementary schools are located within Massachusetts' larger school districts, and 135 house Chapter 1 programs. That is, 63 percent of the nonpublic elementary schools participate in Chapter 1 programs. Almost all of the participating schools are located within the school district where the Chapter 1 attendance area students live. Only 7 schools are located outside. Participating nonpublic

TABLE 1. MASSACHUSETTS CHILDREN ENROLLED IN PUBLIC AND NONPUBLIC SCHOOLS IN THE LARGER SCHOOL DISTRICTS AND ESTIMATED CHAPTER 1 PARTICIPATION RATES, 1984-85

Total Enrollment (Adjusted)	Selected Districts Schools (a)	Chapter 1 Attendance Areas (b)	Chapter 1 as Percent of Total (b/a)	Estimated Chapter 1 Participants (c)	Estimated as Percent of Chap 1 Attendance Area (c/b)
Public Schools	359,624	216,441	60.2%	50,062	23.1%
Nonpublic Schools	72,651	34,746	47.8%	6,659	19.2%
Total	432,275	251,187	58.1%	56,721	22.6%
Nonpublic as Percent of Total	16.8%	13.8%		11.7%	

Note: The selected districts are those enrolling 5,000 or more public school students, plus the 7 districts enrolling 2,500 to 4,999 students with large concentrations of Chapter 1 students (that is, the Chapter 1 grant for the district averages more than $100 for each public school students, a proxy measure used to identify high density Chapter 1 districts). The statistics are taken from the State Department document, Massachusetts Schools, 1983-1984.

The total enrollment in nonpublic schools has been adjusted to account for the grade spans covered by Chapter 1 programs. From the actual total of 96,251 nonpublic school students (representing 21 percent of total enrollment), some 23,600 students are excluded since they attend either nursery/kindergarten or special education schools.

Chapter 1 attendance areas are defined as the attendance areas of public schools that have the same or higher proportion of students in poverty as is found district-wide. In 28 of the 39 districts, poverty is measured as the percent of children 5 to 17 years of age who are on the AFDC rolls. In 7 of the remaining districts, the figure is derived by taking 70 percent of the number on AFDC and 30 percent of the number participating in the federal School Lunch program. All districts in Massachusettts must use at least 70 percent AFDC as the baseline.

The estimates are taken from the Chapter 1 program application each public school district files with the state office.

schools draw well over half (57 percent) of their enrollments from Chapter 1 attendance areas (whether those schools are located in the school district or not).

Chapter 1 high school programs are more rare. Some 22 of the 39 districts have Chapter 1 programs at the high school level, but only 15 of those districts have nonpublic high schools within their boundaries. A total of 40 nonpublic high schools are located in these districts (17 in one district alone), and 10 of these high schools have Chapter 1 programs.

What distinguishes participating from nonparticipating nonpublic schools? For both elementary and high schools, participating nonpublic schools are slightly larger than nonparticipating schools. The average total school enrollment for participating elementary schools is 285, compared to 241 for nonparticipating. Nonpublic high schools housing Chapter 1 programs average a total school enrollment of 502, compared to only 354 for schools without programs. Of the 110 schools not participating, 15 enrolled fewer than 100 students total. Fewer than 20 Chapter 1 residents were enrolled in an additional 14 nonparticipating schools, regardless of the school's overall size.

The most distinguishing difference among participating and nonparticipating nonpublic schools is their affiliation. All of the high school programs and all but 4 of the participating elementary schools are Catholic schools. The four exceptions are a kindergarten program, a "street academy" school, a Seventh-Day Adventist School, and a Lutheran school. The four combined offer services to 88 nonpublic school children; 48 of whom attend one school. Of the 6,600 nonpublic school students in Chapter 1 programs, all but 88 attend Catholic schools. Catholic schools represent 98 percent of the participating schools, but only 39 percent of the nonparticipating schools. (The affiliation of some nonpublic schools was provided by the Archdiocese. Others were defined as Catholic because the name seemed Catholic, as in Immaculate Conception, or the principal was a Sister, Father, or Brother.)

Differences in size also distinguish between Chapter 1 programs in nonpublic and public schools. Looking at data aggregated to the district level, the average number of children in a Chapter 1 program per participating nonpublic school is 35, compared to an average size of 109 for public school programs. Some 17 of the 32 districts with Chapter 1 programs in nonpublic schools average fewer than 30 students per nonpublic school, while none of the districts have fewer than 30 students per public school program. One consequence of this is that a majority of districts do not have a full-time Chapter 1 teacher for each participating Chapter 1 nonpublic school. Issues of size are exacerbated when program data are further broken down by grade spans. With an average of only 35 students per school program, the number of children per grade in an elementary school, assuming a

kindergarten through 8th grade range, is only 4, compared to 12 children per grade when schools average 109 students.

THE DISTRIBUTION OF NONPUBLIC SCHOOL STUDENTS INSIDE AND OUTSIDE SCHOOL DISTRICTS OF RESIDENCE

Three questions about the distribution of Chapter 1 area residents in nonpublic schools are especially important: (a) What proportion of Chapter 1 residents attend nonpublic schools outside the district? (b) What proportion of Chapter 1 area residents attend nonpublic schools where they are a small minority (e.g., less than 10 students) in those schools? and (c) To what extent are Chapter 1 programs provided to students who attend nonpublic schools located beyond school district boundaries?

What proportion of Chapter 1 residents attend nonpublic schools outside the district? Only 24 of the 39 program applications provided enough data to estimate the number of Chapter 1 residents attending schools outside the district (and who were not in schools with Chapter 1 programs). Table 2 displays the available data. For low density districts (those having low concentrations of Chapter 1 students), out-of-district enrollments range from 5 to 100 percent with no clear pattern emerging. For high density districts, on the other hand, the smaller districts appear to have a higher proportion of out-of-district students than the larger districts. The small districts (enrollments of 2,500 to 5,000 students) average about 46 percent of their Chapter 1 residents enrolling in out-of-district schools. The two high density districts with 20,000 to 25,000 students, on the other hand, have an average out-of-district enrollment of 21 percent, and the 6 medium-sized high density districts'out-of-district enrollment averages 18.5 percent.

What proportion of Chapter 1 area residents attend nonpublic schools where they are a small minority (e.g., less than 10 students) in those schools? Some eight of the 39 school districts provided extensive data on enrollments in individual nonpublic schools located outside district boundaries. The general pattern was for students to be concentrated in a few schools within the district with out-of-district students widely scattered among a number of out-of-district schools. Chapter 1 residents rarely exceed 10 or 20 students in those schools. For example, in one medium-sized district, the program application lists 25 nonpublic schools that Chapter 1 residents attend; 12 are outside the district. None enroll more than 20 Chapter 1 area residents, and nine enroll less than 10. For reviewing program applications, it was common for Chapter 1 directors to send letters to all nonpublic schools that Chapter 1 area residents attend, and for sizable numbers of these schools not to respond. One district, for example, sent letters to 40 nonpublic schools; 16 failed to respond to follow-up inquiries.

How many districts provide programs to students outside the districts? Seven districts provide Chapter 1 programs for nonpublic school students attending schools outside the public district boundaries. Six of these districts appear in Table 2. None of these

TABLE 2. DISTRIBUTION OF CHAPTER 1 RESIDENTS IN NONPUBLIC SCHOOLS, INSIDE AND OUTSIDE DISTRICT BOUNDARIES

DISTRICT	TOTAL CHAPTER 1 RESIDENTS IN NONPUBLIC SCHOOLS (A)	CHAPTER 1 RESIDENTS IN PARTICIPATING SCHOOLS	CHAPTER 1 RESIDENTS IN NON-PARTICIPATING SCHOOLS	CHAPTER 1 RESIDENTS OUTSIDE DISTRICT (B)	OUT OF DISTRICT RESIDENTS AS PERCENT OF TOTAL (B)/(A)
High Density Districts--Enrollment 20,000-25,000 students (2 of 2 districts)					
B	2,506	1,920	50	536	21%
C	1,036	712	99	225	22%
High Density Districts--Enrollment 5,000-10,000 students (6 of 9 districts)					
J	2,162	DK**	DK*	375	17%
K	780	442	212	126	16%
L	612	579	0	33	5%
M	1,647	1,423	0	224	13%
O	416	371	0	45	11%
Q	962	544**	0	418	43%
High Density Districts--Enrollment 2,500 to 5,000 students (6 of 7 districts)					
R	942	660**	49	223	25%
S	285	279	0	6	2%
U	68	0	0	68	100%
V	265	179	0	86	32%
W	188	44**	0	144	77%
X	845	306**	0	539	64%
Low Density District--Enrollment 10,000-15,000 students (1 of 1 district)					
Y	387	68	44	275	71%
Low Density Districts--Enrollment 5,000 to 10,000 students (9 of 14 districts)					
Z	51	0	0	51	100%
AA	182	0	128	54	30%
BB	174	0	97	77	44%
DD	242	187**	11	44	18%
FF	1,410	1,208	133	69	5%
II	916	368	77	471	51%
JJ	972	499	0	473	49%
LL	373	0	0	281	75%
MM	280	158	0	122	44%

Note: These figures are based on the grade spans covered by the Chapter 1 program so may not reflect the entire nonpublic student population living in Chapter 1 attendance areas. Nine of the districts have high schools programs, while the other 14 do not.

* Very few students are in this category, but the exact number is unknown.

** These districts support programs in nonpublic schools located outside the public school district boundaries.

districts enrolls more than 8,000 students. Three of the districts are among the seven high density, small districts; one is a low density, mid-sized district, and two are high density medium-sized districts.

CROSS DISTRICT COMPARISONS OF NONPUBLIC SCHOOL PARTICIPATION IN CHAPTER 1 PROGRAMS

Districts were first ranked according to what percent of nonpublic school children in Chapter 1 attendance areas were enrolled in Chapter 1 programs. As shown in Figure 1, the variation across districts is enormous. Seven districts support no program for nonpublic school children, while 2 districts provide services to more than 40 percent of the nonpublic school children residing in Chapter 1 attendance areas. Districts also do not cluster around the mean; the modes are at zero percent (N=7), 5 to 9 percent (N=8) and 20 to 24 percent (N=6). Three sets of districts were then examined in more detail: those with relatively high proportions of nonpublic school children served (that is, at least 20 percent), those with programs for nonpublic school students but with relatively low proportions served (that is, less than 10 percent), and those with no programs.

Tables 3 and 4 present descriptive data on the districts serving relatively high and relatively low proportions of nonpublic school children in Chapter 1 programs, respectively. As Table 3 reveals, the 11 districts with higher proportions of nonpublic school children participating are the larger school districts (average enrollment 15,406) and the poorer school districts (the district wide percentage of children on AFDC rolls was 18 percent), for the most part.

The 10 school districts listed in Table 4, with less than 10 percent of the nonpublic school children residing in Chapter 1 attendance areas, are smaller districts (with average enrollments of 6,555) and have somewhat fewer poor children (the district wide percentage of AFDC children was 11 percent).

Because the amount of a district's Chapter 1 grant is calculated from the number of poor children in the district, and since the high nonpublic participation districts are both larger and poorer than the low nonpublic participation districts, the average size of the Chapter 1 district grant was compared for both sets of districts. To ensure that this comparison is not a function of district size alone, the 4 low participation districts enrolling between 2,700 and 4,500 students were taken out of the calculations. For high participation nonpublic districts, the average grant was $2.91 million, while for the low participation nonpublic districts the average grant was only two-fifths as large or $1.1 million. Since the average percent of nonpublic school children in the two sets of districts are both relatively large and roughly comparable (13% vs 15%), although highly variable within both sets, the absolute size of the Chapter 1 grant appears a strong predictor of nonpublic school participation in Chapter 1 programs when sufficient nonpublic school options are available for residents of low income neighborhoods.

FIGURE 1. FREQUENCY DISTRIBUTION OF DISTRICTS BY PARTICIPATION RATES OF NONPUBLIC STUDENTS IN CHAPTER 1 PROGRAMS

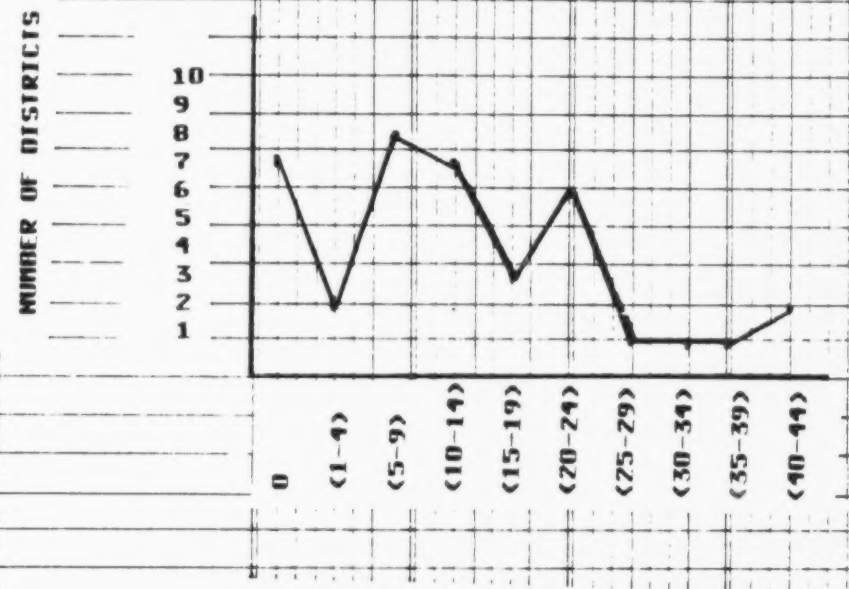

TABLE 3. MASSACHUSETTS SCHOOL DISTRICTS WITH RELATIVELY HIGH PROPORTIONS OF NONPUBLIC SCHOOL CHILDREN IN CHAPTER 1

District Name	Estimated Nonpublic Participants as Percent of Nonpublic in Chapter 1 Areas	Estimated Public Participants as Percent of Public in Chapter 1 Areas	District Percent Poverty	Public Enrollment in District	Public Students Residing in Chapter 1 Attendance Areas	Nonpublic Students Residing in Chapter 1 Attendance Areas	Percent Nonpublic Students in Chapter 1 Attendance Areas	Number Nonpublic Students Participating in Chapter 1 Programs
O	43.3[a]	41.7	12.6	6,776	2,205	416	15.9	180
H	43.0[a]	22.5	20.6	11,986	8,414	465	5.2	200
A	39.9	29.3	30.0	59,303	37,524	4,977	11.7	1,987
MM	33.0	26.5	10.9	6,599	2,171	255	3.8	85
F	27.8	23.4	23.4	12,481	9,705	1,851	16.0	515
M	24.6	33.3	33.1	8,580	4,856	1,409	22.5	347
C	24.3	30.2	21.7	20,411	9,136	1,036	10.2	252
B	24.6	38.4	34.6	22,653	12,677	2,506	16.5	602
DD	22.7	15.4	3.2	5,225	2,405	242	9.1	55
GG	22.4[a]	22.3	5.5	8,739	2,667	290	11.3	65
I	20.0	41.0	37.5	6,713	6,575	1,420	17.8	285

[a] For these districts, the program applications did not contain the number of nonpublic children in Chapter 1 attendance areas, but only the number of Chapter 1 area residents in nonpublic schools with Chapter 1 programs. Using the second as an estimate of the first may have inflated the figures on the proportion of nonpublic school children in Chapter 1 programs (compared to all nonpublic school children residing in Chapter 1 attendance areas).

Note: With the exception of the total public school enrollments (taken from Massachusetts Schools, 1983-1984), all information above comes from the Chapter 1 program application submitted by the school district to the State.

TABLE 4. MASSACHUSETTS SCHOOL DISTRICTS WITH RELATIVELY LOW PROPORTIONS OF NONPUBLIC SCHOOL CHILDREN IN CHAPTER 1

District Name	Estimated Nonpublic Participants as Percent of Nonpublic in Chapter 1 Areas	Estimated Public Participants as Percent of Public in Chapter 1 Areas	District Percent Poverty	Public Enrollment in District	Public Students Residing in Chapter 1 Attendance Areas	Nonpublic Students Residing in Chapter 1 Attendance Areas	Percent Nonpublic Students in Chapter 1 Attendance Areas	Number Nonpublic Students Participating in Chapter 1 Programs
Y	3.62	8.42	2.2%	10,411	2,186	387	15.0%	12
EE	4.4	10.5	6.0	5,662	1,671	226	11.9	10
W	5.0	16.4	12.0 [b]	4,383	4,406	787	15.2	39
D	6.2	20.2	15.3	16,699	13,608	1,044	7.1	65
II	6.3	9.8	7.1	5,235	3,592	916	20.3	58
T	6.9 [a]	13.0	15.6	4,560	5,249	866	20.8	60
JJ	7.3 [a]	9.3	4.8	6,749	2,687	972	15.6	71
U	7.5 [a]	22.7	20.6	2,717	2,567	265	9.0	20
Q	8.3	12.5	6.8	6,108	2,916	962	27.3	80
V	8.5	12.8	17.3	3,029	2,171	188	6.1	16

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[a] For these districts, the program applications did not contain the number of nonpublic children in Chapter 1 attendance areas, but only the number of Chapter 1 area residents in nonpublic schools with Chapter 1 programs. Using the second as an estimate of the first may have inflated the figures on the proportion of nonpublic school children in Chapter 1 programs (compared to all nonpublic school children residing in Chapter 1 attendance areas).

[b] Figure is estimated from the program application.

Note: With the exception of the total public school enrollments (taken from Massachusetts Schools, 1983-1984), all information above comes from the Chapter 1 program application submitted by the school district to the State.

In comparing high and low participation districts, it is also important to look at numbers as well as percentages. The higher participation districts have a larger number of nonpublic students living in Chapter 1 attendance areas (a mean of 1,351) though not necessarily a larger percentage of nonpublic school children in Chapter 1 attendance areas. The low participation districts have smaller numbers of nonpublic school children residing in Chapter 1 attendance areas (a mean of 662). One consequence of having small numbers of nonpublic school children residing in Chapter 1 attendance areas is that small number shifts in enrollments dramatically alter the participation rates. In 4 of the 10 low participation districts, the participation rates for the public and nonpublic school children would be the same if nonpublic enrollments were increased by no more than 20 students. For the 10 districts as a whole, an average increase of 96 students per district would create equal participation rates for public and nonpublic students.

One final comparison between Tables 3 and 4 is to see how discrepant the estimated participation rates for nonpublic and public school students are. The high participation districts have relatively high participation rates for public students in Chapter 1, while the low participation districts also have low participation rates for public students for the most part. What becomes key to examine then is the within-district discrepancy between public and nonpublic participation, regardless of the overall proportions served.

Those districts with no nonpublic school programs are special cases of discrepant districts. As was found in earlier studies, variables of size seem paramount in predicting whether nonpublic school children will be enrolled in Chapter 1 programs. As Table 5 reveals, 7 districts have no nonpublic school children enrolled in Chapter 1 programs. All have fewer than 10 percent nonpublic school children living in Chapter 1 attendance areas, including 2 with about 50 nonpublic students in those areas. In the district where no figures were available, the only nonpublic schools located in the district were nursery and kindergarten schools. Of the nonpublic schools outside the district enrolling Chapter 1 area residents, none have more than 4 eligible students. Of the 7 districts, four have relatively low incidences of poverty (the district wide poverty average is less than 10 percent). Of the three with higher poverty percentages (that is, greater than 10 percent), one has only 50 nonpublic school students living in Chapter 1 areas. In the other two districts, one has a single nonpublic school that declined to participate, while the other had fewer than 10 low achieving students in any of the 5 nonpublic schools.

TABLE 5. MASSACHUSETTS DISTRICTS WITH NO NONPUBLIC SCHOOL CHILDREN IN CHAPTER 1 PROGRAMS

District Name	Estimated Nonpublic Participants as Percent of Nonpublic in Chapter 1 Areas	Estimated Public Participants as Percent of Public in Chapter 1 Areas	District Percent Poverty	Public Enrollment in District	Public Students Residing in Chapter 1 Attendance Areas	Nonpublic Students Residing in Chapter 1 Attendance Areas	Percent Nonpublic Students in Chapter 1 Attendance Areas	Number Nonpublic Students Participating in Chapter 1 Programs
KK	0	19.9%	13.12	7,974	4,321	436	9.22	0
RR	0	19.2	7.5	5,757	1,932	182	8.6	0
U	0	17.6	25.9	2,572	2,537	50	2.0	0
LL	0	16.6	14.2	5,012	3,935	373	8.7	0
Z	0	9.2	2.4	6,107	1,085	51	4.5	0
BB	0	7.7	6.9	5,231	3,717	185	4.7	0
CC	0	4.4	4.5	7,456	4,206	NA	NA	0

Note: With the exception of the total public school enrollments (taken from Massachusetts Schools, 1983-1984), all information above comes from the Chapter 1 program application submitted by the school district to the State.

In summary then, the absolute size of the Chapter 1 grant appears a strong predictor of nonpublic school participation (if nonpublic options are available). Also, the more nonpublic students in a district, the higher the participation rates, although the addition of a few students in the districts with few students alters that picture dramatically. There appears to be a relatively strong correlation across participation rates for public and nonpublic schools. That is, high participation rates for nonpublic schools are associated with high participation rates for public schools, and low nonpublic rates are associated with low public rates of participation. This may reflect a programmatic decision about how to concentrate Chapter 1 resources. Lastly, the districts that have no programs for nonpublic students all have less than 10 percent of total enrollments in nonpublic schools, and either have a low incidence of poverty or have no nonpublic schools enrolling low achieving students.

PHASE 2: FACTORS ASSOCIATED WITH DIFFERENCES IN CHAPTER 1 PARTICIPATION RATES BETWEEN PUBLIC AND NONPUBLIC SCHOOLS

In Chapter 1 law, the equal access provisions apply on a within-district basis. Phase 2 of the study then focused on districts with marked differences in participation rates, so that we could identify factors associated with the within district differences. A purposive sample of 10 districts was chosen from the pool of 39 districts for interviews with Chapter 1 directors and nonpublic school principals.

To select the sample, two proportions were computed for each district: the proportion of nonpublic school students participating in Chapter 1 programs compared to the total number of nonpublic school students living in Chapter 1 attendance areas, and the proportion of public school students participating in Chapter 1 programs compared to the total number of public school students living in Chapter 1 attendance areas. The selection of districts was based solely on residential eligibility: the numbers of public and nonpublic school children living in Chapter 1 attendance areas. Selection is not based on the proportion of participants relative to eligible school children since no school level data are available on students' educational achievement.

Districts selected were those with substantial differences between the proportion of nonpublic and public children participating in Chapter 1 programs. One group were those districts where the relative percentage of public enrollment is at least 50 percent more than the relative percentage of nonpublic school enrollment in Chapter 1 programs; the other group was to be the reverse--those districts where the relative percentage of nonpublic enrollment is at least 50 percent more than the relative percentage of public school

enrollment in Chapter 1 programs. Some 15 districts fell into the former category but none fell into the latter, so the discrepancy percentage was reduced to 30 percent, thus allowing 4 districts in the sample. These two sets of districts are listed in Tables 6 and 7, respectively.

From these 19 districts, ten were chosen for in-depth telephone interviews with the Chapter 1 coordinator and with principals of both participating and nonparticipating nonpublic schools. The 4 districts where proportionately more nonpublic than public students participate were chosen as well as at least one district in every major district size category where the public participation was proportionately higher than the nonpublic participation. In making the latter selection, districts were purposively chosen to include factors that may be related to differential participation rates (such as discrepancies in grade spans covered in the public and nonpublic programs, and Chapter 1 residents attending Christian schools), as well as interesting and rather rare features (such as nonpublic students in out-of-district Chapter 1 programs, Chapter 1 programs in non-Catholic schools, and districts in different Archdioces). Characteristics of the sample districts are displayed in Figure 2. Also included on the chart are the number of participating and nonparticipating nonpublic schools in each of the 10 districts.

In all districts save one, the Chapter 1 coordinator was interviewed. The director of federal programs for one Archdiocese was interviewed as was the former director of testing for the other Archdiocese. Principals of participating and nonparticipating nonpublic schools made up the bulk of the respondents. The universe and respondent sample for nonpublic schools appears in Table 8 on the following page.

In all but the largest district, all nonparticipating principals were interviewed. In the largest district, two of the four nonparticipating schools who used to participate were interviewed. Information on an additional 27 schools was provided by the Archdiocese and the Chapter 1 office.

In all but the three largest districts, all participating principals were interviewed (with 3 nonrespondents). In 2 of the larger districts, either 3 or 4 nonpublic schools were randomly selected (after grouping to ensure diversity in size of program). For the most urban district, the sample included 2 schools thought to have the largest waiting lists, the one non-Catholic school, and the school with the newest program. The most urban district may be somewhat underrepresented, although there was a remarkable consistency across all responses.

TABLE 6. MASSACHUSETTS DISTRICTS WITH PROPORTIONATELY MORE PUBLIC THAN NONPUBLIC SCHOOL CHILDREN PARTICIPATING IN CHAPTER 1 PROGRAMS

District Name	Estimated Nonpublic Participants as Percent of Nonpublic in Chapter 1 Areas	Estimated Public School Participants as Percent of Public in Chapter 1 Areas
B	24.6%	38.4%
I	20.0[a]	41.0
G	18.6	27.3
J	14.8	24.4
M	13.0	25.9
R	12.1	28.6
E	11.2	21.9
W	8.5	12.8
Q	8.3	12.5
U	7.5[a]	22.7
T	6.9[a]	13.0
D	6.2	20.2
X	5.0	16.4
EE	4.4	10.5
Y	3.6	8.4

Note: Districts were selected where the relative percentage of public enrollment is at least 50 percent more than the relative percentage of nonpublic student enrollment in Chapter 1 programs.

[a] For these districts, the program applications did not contain the number of nonpublic children in Chapter 1 attendance areas, but only the number of Chapter 1 area residents in nonpublic schools with Chapter 1 programs. Using the second as an estimate of the first may have inflated the figures on the proportion of nonpublic school children in Chapter 1 programs (compared to all nonpublic school children residing in Chapter 1 attendance areas).

TABLE 7. MASSACHUSETTS DISTRICTS WITH PROPORTIONATELY MORE NONPUBLIC THAN PUBLIC SCHOOL CHILDREN PARTICIPATING IN CHAPTER 1 PROGRAMS

District Name	Estimated Nonpublic Participants as Percent of Nonpublic in Chapter 1 Areas	Estimated Public School Participants as Percent of Public in Chapter 1 Areas
H	43.0%[a]	22.5%
A	39.9[a]	29.3
DD	22.7	15.4
S	17.2	13.3

Note: Districts were selected where the relative percentage of nonpublic enrollment is at least 30 percent more than the relative percentage of public student enrollment in Chapter 1 programs.

[a] For these districts, the program applications did not contain the number of nonpublic children in Chapter 1 attendance areas, but only the number of Chapter 1 area residents in nonpublic schools with Chapter 1 programs. Using the second as an estimate of the first may have inflated the figures on the proportion of nonpublic school children in Chapter 1 programs (compared to all nonpublic school children residing in Chapter 1 attendance areas).

FIGURE 2. CHARACTERISTICS OF THE SAMPLE DISTRICTS

PUBLIC ENROLLMENT SIZE/DISTRICT	DISCREPANCY IN PARTICIPATION RATE	DISCREPANCY IN GRADE SPANS	CHAPTER 1 RESIDENTS IN CHRISTIAN SCHOOLS	NON-CATHOLIC SCHOOLS INVOLVED	OUT-OF-DISTRICT PROGRAMS	ARCHDIOCESE	NONPUBLIC SCHOOLS IN DISTRICT	
							PART	NONPART
OVER 50,000								
A	NP>P			X		B	30	34
15,000-25,000								
B	P>NP	X	X			S	9	2
D	P>NP	X	X	X		B	3	6
10,000-15,000								
H	NP>P		X			B	4	1
G	P>NP	X				B	5	9
5,000-10,000								
DD	NP>P					B	1	1
M	P>NP	X		X		B	2	2
2,500-5,000								
S	NP>P					B	3	0
R	P>NP	X			X	B	3	1
X	P>NP				X	B	1	1

TABLE 8. UNIVERSE OF AND RESPONDENTS AMONG PARTICIPATING AND NONPARTICIPATING NONPUBLIC SCHOOLS, BY DISTRICT

DISTRICT	UNIVERSE		SAMPLE	
	PART	NONPART	PART	NONPART
	SCHOOLS		SCHOOLS	
A	29	35	4[a]	2 (+27)[b]
B	9	2	3[a]	2
D	3	5	3	5
H	4	1	4	1
G	8	6	4[a]	5
DD	2	1	2	1
M	2	2	1	2
S	3	0	2	0
R	4	1	4	1
X	2	1	1	1
TOTAL	66	55	28	20 (+27)

a For the largest district, the four schools selected were two of the four thought to have the largest waiting lists, the one non-Catholic participating school, and the school with the newest program. For the other two districts, schools were selected at random (after ranking schools by size of program).

b Two of the four schools which once housed Chapter 1 programs were interviewed. The figures in percentages reflect the number of schools with entrance exams and the number of schools in ineligible attendance areas (based on information supplied by the Archdiocese and the Chapter 1 office).

Except for the largest district where the Chapter 1 office and Archdiocese interviews were conducted on site, interviews were telephone interviews averaging 45 minutes (for coordinators), 30 minutes (for participating schools), and 10 minutes (for nonparticipating schools).

In addition to demographic information and questions on the selection process, the interviews asked a series of questions that connected with the factors hypothesized to account for discrepancies in participation rates. These factors, listed earlier, were whether (a) nonpublic schools have the same proportion of low achieving students (usually indicated by multiple criteria, including ranking at or below the 40th percentile on standardized tests); (b) school districts contact all the nonpublic schools that Chapter 1 attendance area students attend, (c)nonpublic and public school offerings cover the same grade spans, (d) the same (or equivalent) criteria are used for determining educational eligibility for Chapter 1 programs, (e) nonpublic schools agree to allow their students to participate in Chapter 1 programs, (f) the nature of the relationship between the public and nonpublic schools is cooperative, (g) nonpublic school personnel perceive Chapter 1 as a program their students should have equal access to, and (h) there are sufficient numbers of eligible children attending a nonpublic school to warrant providing Chapter 1 services to those students.

To analyse the interview data, each district was first looked at separately. Then comparisons were made between those districts serving proportionately more public school students and those serving proportionately more nonpublic school students. For ease in reading, those serving proportionately more public school children are called the "public" districts, while those serving proportionately more nonpublic school children are called the "nonpublic" districts.

Before presenting the analysis, organized by factor, it will be helpful to examine the distribution of nonpublic school students within each of the 10 districts (see Table 9). In parens after each district letter are the percents of Chapter 1 participants to Chapter 1 residents for public and nonpublic schools. Although a number of districts have missing data, the table visually displays areas of inquiry, including characteristics of nonparticipating schools (especially in one district), the distribution of students outside district boundaries, and variations in the participation rates when Chapter 1 students in the participating schools are taken as the base. The most serious missing data are for the two "nonpublic" districts where the total number of Chapter 1 residents attending nonpublic schools is not available. Using available data to estimate the total may have inflated the participation rate. Partial information is available in most other cases.

TABLE 9. DISTRIBUTION OF CHAPTER 1 RESIDENTS AMONG NONPUBLIC SCHOOLS, BY SELECTED DISTRICTS

DISTRICT	TOTAL RESIDENTS	CHAPTER 1 PARTICIPANTS	CHAPTER 1 RESIDENTS IN PART SCHOOLS	CHAPTER 1 RESIDENTS IN NONPART SCHOOLS	IN OUTSIDE DISTRICT SCHOOLS
"Nonpublic"					
A (NP=40%, P=29%)	---	1,987	1,977	--	--
N (NP=43%, P=22%)	---	200	465	10	--
DO (NP=23%, P=15%)	242	55	187	11	44
S (NP=17%, P=13%)	285	88	279	0	6
"Public"					
B (NP=25%, P=38%)	2,506	602	1,920	50	536
D (NP=6%, P=20%)	1,044	65	305	575	164
G (NP=19%, P=27%)	2,013	375	---	---	---
H (NP=13%, P=26%)	665	85	316	---	---
R (NP=12%, P=29%)	942	114	660	49	233
W (NP=5%, P=16%)	845	39	306	0	539

Note: The "public" districts are those where disproportionately more public than nonpublic Chapter 1 residents are enrolled in Chapter 1, while the "nonpublic" districts are those where disproportionately more nonpublic than public Chapter 1 residents are enrolled in Chapter 1 programs.

After each of the factors is discussed in turn, we will briefly present the study conclusions.

DO NONPUBLIC SCHOOLS HAVE THE SAME PROPORTION OF STUDENTS MEETING THE EDUCATIONAL ACHIEVEMENT REQUIREMENTS FOR CHAPTER 1 PROGRAMS?

Nonpublic schools enroll far fewer low achieving students than public schools. To illustrate this, we will look first at the nonparticipating schools to see how many have admissions requirements or enroll no low achieving students. Then we will look at participating schools (public and nonpublic) to see whether there are waiting lists for the Chapter 1 programs. If there are no waiting lists, then one could argue that all eligible Chapter 1 residents in those schools are enrolled in Chapter 1 programs.

For the six "public" districts, there are some 17 nonparticipating schools. Four have admission requirements, 4 have no low achieving students, and an additional 3 may have "at most a few" low achieving students below the 50th percentile. In short, 11 of the schools enroll no low achieving Chapter 1 students, according to the schools' principals. Of the 6 remaining, two have 15 or fewer Chapter 1 residents, 2 are elementary schools with tuitions of over $1,300 per year per child, and 2 had missing data.

For the four "nonpublic" districts, one district had no nonparticipating schools and 2 districts had one nonparticipating school each. These two schools either had admissions requirements or enrolled no low achieving students, according to their principals. The fourth district is the most urban district. Of its 15 nonparticipating high schools, 14 are "exam" schools with admissions requirements. Of the 21 nonparticipating elementary schools, 3 had admissions requirements. [Some 13 were located in ineligible attendance areas, one school located in an eligible attendance area chose not to participate, and 4 have missing data (three of these have a total enrollment of less than 70 students each)].

Looking across all 10 districts and subtracting for the moment the 13 schools located in ineligible attendance areas of the most urban district, of the 42 nonparticipating schools remaining, 30 enroll no low achieving students (Table 10 lists the characteristics of all nonparticipating schools in the 10 district sample).

Turning now to whether all educationally eligible children are served in participating schools, the central question is whether there are waiting lists for public and nonpublic schools. Among the 28 principals of participating nonpublic schools, 26 said there were no waiting lists. One thought they could accomodate an additional 20 students, and another thought they could serve "a few 10th graders" in a program now serving only 9th graders. These two districts were both "public" districts.

TABLE 10. CHARACTERISTICS OF NONPARTICIPATING SCHOOLS LOCATED WITHIN DISTRICT BOUNDARIES

CHARACTERISTICS	NUMBER	PERCENT
ADMISSION REQUIREMENTS	23	42%
NO LOW ACHIEVING STUDENTS	4	7
PROBABLY NO LOW ACHIEVING STUDENTS	3	5
SCHOOL CHOSE NOT TO PARTICIPATE	5	9
VERY FEW CHAPTER 1 RESIDENTS ENROLLED	7	13
SCHOOL NOT LOCATED IN ELIGIBLE ATTENDANCE AREA	15	27
MISSING DATA	6	11
TOTAL SCHOOLS=55;	TOTAL= 69	TOTAL= 114%*

* Total adds to more than 100 percent since some categories are not mutually exclusive.

One of the "public" districts is the most urban district. Its small sample size may not provide an accurate picture of waiting lists for nonpublic schools. However, of the five schools listed by the Archdiocese as having the largest waiting lists, the two called had no waiting list. Nor did the one non-Catholic school participating in Chapter 1. More interviews in this city would strengthen the study design.

For waiting lists among public schools, Chapter 1 coordinators were asked for their best estimate of waiting lists. According to the Chapter 1 coordinators in the 6 "public" districts, one served virtually all students, one thought there weren't many on the waiting list, the third mentioned small waiting lists for some schools, and the fourth said there was a waiting list only for the junior and senior high school programs. No information was available for the remaining two districts.

For the 4 "nonpublic" districts, one had a very small waiting list, another noted 25 students were on the list (5 percent of those eligible), while the third thought some 85 to 90 percent of eligible students were served (this would translate into a waiting list of roughly 200 public school students for the district). In the fourth and most urban district, some 12.5 percent of the eligible elementary school children, 21 percent of the junior high school students and 44 percent of the eligible high school students are on waiting lists. In 4 of the participating high schools, more than 200 names are on the waiting list. The Chapter 1 office said the list would be longer, but didn't want to require the school to go through the exercise to list every name.

From these interviews, it appears that all eligible students attending nonpublic schools are served in Chapter 1 programs. In most of the districts, virtually all eligible students in public schools are also served, with small waiting lists for the junior and senior high school programs. The most urban district is a marked exception. Here there are waiting lists at all levels. Over 3,000 public school students are on waiting lists for Chapter 1 programs. It appears in the most urban setting that poverty and low achievement are compounding: the largest concentrations of poverty have higher percentages of low achieving students. While allocating funds based on the number of children in poverty works fairly well for most districts so that virtually all low achieving children in low income areas are served, the allocation does not encompass all eligible children in the most urban areas.

DO SCHOOL DISTRICTS CONTACT ALL THE NONPUBLIC SCHOOLS THAT CHAPTER 1 ATTENDANCE AREA STUDENTS ATTEND?

This question focuses on whether districts put restrictions on nonpublic schools that could limit the provision of services to eligible Chapter 1 residents. Three interview questions were asked: How does the Chapter 1 program define eligible schools? What is the process districts use to contact schools? And to what extent does the district contact schools outside district boundaries?

How does the Chapter 1 program define eligible schools? The most urban district restricts nonpublic schools to those located in Chapter 1 attendance areas. This policy has been in effect since 1970 and is seen by the nonpublic school principals interviewed as a "given." Two other districts (both "public" districts) may also restrict schools to those located in eligible attendance areas, although their policies are not clear cut. For example, one district said it sent letters to all schools with Chapter 1 residents and is considering providing services to a nonpublic school in a neighboring town, but also said that one school in the district has never been notified about Chapter 1 services because it wasn't located in an eligible attendance area. As it turned out, the school has admissions requirements and enrolls no one below the 50th percentile. The other district said it notifies every parochial school in the city and then ranks schools in terms of the percent of Chapter 1 residents who attend those schools. If the schools then request services, the program checks them out. Two of the nonparticipating schools who applied for services were told they were located in an ineligible attendance area, one participating school said it made no difference where schools were located, and another participating school said they had to be notified since they were located in an eligible attendance area.

What is the process programs use to contact schools? The "public" and "nonpublic" districts follow quite similar procedures for contacting nonpublic schools. Letters are sent to nonpublic schools enrolling either city residents or Chapter 1 area residents, notifying them of Chapter 1 services if they have low achieving students who live in eligible attendance areas. Three of the four largest districts do not contact nonpublic schools outside the district (data were unavailable on the fourth). The two smallest districts contact all nonpublic schools enrolling four or more Chapter 1 residents, while the third smallest sends letters to all nonpublic schools enrolling city residents. Two of these districts support out-of-district programs, where a parish school cuts across city boundaries. Among the medium-sized districts, one sends a letter to all nonpublic schools with at least 25 district students enrolled while the other two send letters either with a list of streets eligible students must live on or noting that if 10 or more students are below the 40th percentile that services may be

provided. One of the mid-sized districts supports an out-of-district program and another is considering support for the coming year. The procedures for contacting schools have remained unchanged in recent years and the Coordinators talked of the process as routine, with relatively stable attendance patterns for nonpublic school students.

To what extent does the Chapter 1 program contact schools outside district boundaries? Three of the four largest school districts do not contact schools outside district boundaries. No information was available on the fourth district. The other smaller districts do contact schools outside the district, and three support out-of-district programs, all in Catholic schools whose parish boundaries encompass part of the school district. Coordinators generally reported that few elementary school students attended out-of-district schools, saying that high school students were more likely to go out-of-district and then to one of the "exam" high schools.

DO NONPUBLIC AND PUBLIC SCHOOL CHAPTER 1 PROGRAMS COVER THE SAME GRADE SPANS?

In four of the six "public" districts, the grade spans covered by the public school Chapter 1 programs exceeded those covered by the nonpublic school programs, while in the four "nonpublic" districts, Chapter 1 grade spans were identical. Three districts did not have a corresponding Chapter 1 program in the nonpublic high school. Two districts had no corresponding pre-kindergarten and a very small kindergarten program in the nonpublic schools, and one had no corresponding 8th grade program in the nonpublic schools.

Differences in grade span coverage appear related to characteristics of nonpublic schools. In the three districts with no corresponding high school program, the nonpublic high schools either had admission requirements or no low achieving students. In addition, several nonpublic elementary schools have chosen not to include the upper grades (i.e., grades 6-8) for Chapter 1 services. A number of principals interviewed noted scheduling was too chaotic and hectic, and teachers had requested the program be discontinued. Although no firm enrollment figures are available, another factor may be size. Fewer students in the upper grades are eligible for Chapter 1 services compared to students in the lower grades.

The absence of prekindergarten and near absence of kindergarten programs in nonpublic schools appears to be related to availability. In one district, only two of the four nonpublic schools had a kindergarten program and almost all Catholic elementary schools administer a reading-readiness test. Principals interviewed said it was difficult to enroll students if they scored too low, and often recommended to parents that they reapply the following year. Numerous

nursery-kindergarten schools are opening, but no data are available on how many Chapter 1 area residents attend these schools, whether there are admissions criteria, or what the instructional content is.

ARE THE SAME (OR EQUIVALENT) CRITERIA USED FOR DETERMINING EDUCATIONAL ELIGIBILITY FOR CHAPTER 1 PROGRAMS?

Massachusetts requires all Chapter 1 programs use multiple criteria in selecting students for programs. The largest district uses only percentile rankings on standardized achievement tests (with more points for lower ranked students) and previous participation in the program, since the size of the program precludes the use of additional criteria (according to program and State personnel). All remaining districts use additional criteria, such as teacher recommendation, ranking in the lowest quartile in the class, held in grade one or more years, and grades of D or F in major subjects. The same criteria and point system are used for students enrolled in public and nonpublic schools. While the process may vary somewhat from district to district, all students are rank ordered on a single master list with most needy students selected first.

In two districts there was some indication that strict rank ordering was not always used, in order to accommodate scheduling concerns. One district coordinator mentioned some students were served in nonpublic schools that wouldn't be served in the public schools. In order to fill class size requirements (of 4-6 children per class), all nonpublic school children scoring below the 40th percentile were included, while in some public schools those scoring between the 30th and 40th percentile were not always included. The number of children involved was apparently very small.

The main distinction in criteria between public and nonpublic schools was in the use of different standardized achievement tests. Figures 3 and 4 lists the tests used for the "nonpublic" and "public" districts, respectively. Whether the use of different tests results in differential initial selection of students is difficult to ascertain. According to the nonpublic school principals, students in the Chapter 1 programs generally meet all of the criteria used--including such factors as failing grades, ranking in the bottom quartile in the class, and retention in grade--so it is unlikely students would be excluded who were just above the 40th percentile. They also reported that while some students test out of Chapter 1 each year, the majority are continuing students.

DO NONPUBLIC SCHOOLS AGREE TO ALLOW THEIR STUDENTS TO PARTICIPATE IN CHAPTER 1?

Very few nonpublic schools chose not to have their students participate in Chapter 1 programs. In four of the districts (two "public" and two "nonpublic"), a total of five nonpublic schools

FIGURE 3. TESTING PROCEDURES FOR PUBLIC AND NONPUBLIC CHAPTER 1 STUDENTS, FOR DISTRICTS WITH PROPORTIONATELY MORE NONPUBLIC THAN PUBIC SCHOOL STUDENTS IN CHAPTER 1 PROGRAMS

DISTRICT	PUBLIC SCHOOL TEST	NONPUBLIC SCHOOL TEST
A	Metropolitan Achievement	1) American Testronics formerly Scott Foresman, 2) Gates McGinty, 3) Metropolitan Achievement, 4) Chapter 1 program also tests recommended Chapter 1 residents in eligible schools.
H	CTBS "We will use what they have."	1) CTBS 2) American Testronics 3) Diocesan High School entrance exam. 4) Chapter 1 program also tests recommended Chapter 1 residents.
DD	CTBS "We use the same tests"	1) American Testronics used school-wide. 2) Chapter 1 program also tests recommended Chapter 1 residents.
S	ITBS "We accept any achievement test not more than two years old	1) American Testronics used school-wide. 2) Chapter 1 program tests recommended Chapter 1 residents.

FIGURE 4. TESTING PROCEDURES FOR PUBLIC AND NONPUBLIC CHAPTER 1 STUDENTS, FOR DISTRICTS WITH PROPORTIONATELY MORE PUBLIC THAN NONPUBLIC SCHOOL STUDENTS IN CHAPTER 1 PROGRAMS

DISTRICT	PUBLIC SCHOOL TEST	NONPUBLIC SCHOOL TEST
B	Metropolitan Achievement	1) ITBS required by the Archdiocese, 2) MAT administered by Chapter 1 to recommended students in eligible attendance areas.
D	CTBS "We will use any test they want."	1) American Testronics required by Archdiocese. 2) Chapter 1 administers tests to recommended students; kindergartners only tested by Chapter 1 teachers.
G	Metropolitan Achievement, and criterion-referenced tests. "Different schools use different tests, but we test all students again."	1) American Testronics 2) Archdiocese entrance exam (high school) 3) Chapter 1 program tests recommended Chapter 1 residents.
M	Metropolitan Achievement "We use the same tests."	1) Chapter 1 program tests all Chapter 1 students already enrolled and those recommended by the teachers.
R	CTBS "We accept any standardized test for initial selection."	1) American Testronics 2) Chapter 1 tests students currently in program.
X	Don't Know	1) American Testronics

chose not to participate in Chapter 1. Relatively few Chapter 1 residents attend these schools. Some 80 Chapter 1 residents attend 3 schools; enrollment data were unavailable for the other two.

None of the five Christian schools participate in Chapter 1; three chose not to participate. Two did not want to "jeopardize our philosophy" or "compromise our freedom of religion." The third chose not to participate because they wanted to be able to choose the person who came into the school, and were in the process of hiring a person to work with their 25-30 low achieving students. The other two Christian schools had no or few low achieving students. One said the program "wasn't for us; we have no low achieving students," while the other had no present plans for Chapter 1 for its two eligible students, though it remains a possibility. Two of the schools receive Chapter 2 funds and review federal programs on a case by case basis. Slightly over 100 Chapter 1 residents were enrolled in the five schools combined.

In addition, one Catholic high school and one Catholic junior high school stopped participating in Chapter 1 a few years ago. The high school was dissatisfied with their lack of control over the program, specifically for restricting class size to 10 students and limiting enrollment to students only from eligible attendance areas, and for not having a voice in teacher selection. The junior high program found it very difficult to manage the daily schedule of students. These were the only cases in the sample of schools not participating due to scheduling difficulties, although other schools chose not to have Chapter 1 programs in the upper grades for the same reason.

IS THE NATURE OF THE RELATIONSHIP BETWEEN THE PUBLIC AND NONPUBLIC SCHOOLS COOPERATIVE?

With two or three exceptions, coordinators and nonpublic school principals viewed the relationship between the Chapter 1 program and the nonpublic schools as excellent. Principals thought the teachers excellent and hardworking. Staff were described as extremely dedicated, accomodating, generous with their time, and open and flexible. Principals felt they could discuss problems with their program with Chapter 1 staff and could work out solutions. Communications were seen as open.

Chapter 1 administrative staff usually dropped by nonpublic schools about once a month, and nonpublic school principals seemed as involved with the program as they wanted to be (which outside their own school was generally very little). They were not involved in decisions about changes in Chapter 1--expanding grade levels, changing program design, etc,--although they were involved in needs assessments and their schools had representatives on Parent Advisory Councils. The principals felt they were kept informed of

changes--such as expansions to the high school level or the addition of a math program, and noted that they were always invited to meetings. Nonpublic school principals focused on their own school's issues and found the Chapter 1 program personnel open, receptive and accomodating to their concerns. In a few cases, principals would contact the Chapter 1 office about starting a new program--in kindergarten or in math, but for the most part programmatic shifts were initiated by the Chapter 1 office. The principals appeared to want no greater role. One coordinator explicitly mentioned as one of his concerns about the program that he wanted to have the nonpublic school principals more involved.

No one saw any barriers to nonpublic school participation, and no one had any concerns about program administration. The most often expressed concern was wanting to serve all low achieving students (not just Chapter 1 residents). This comment arose in every district, and principals noted that between 50 and 100 percent more students would be eligible if attendance areas were not considered. A number of schools and coordinators were concerned about the pending Supreme Court decision on the constitutionality of Chapter 1 programs held on church property. All Chapter 1 programs in these schools are pull-out, on-site programs. Few believed the Court would rule against the programs in parochial schools, in part because the program is 20 years old. No contingency plans had been made, although the most urban district has looked into options for off-site instruction. They noted there were no good alternatives. Buses and crossing guards would be very expensive, and they noted there are sections of town where parents would not want their children to walk (sections of town where Chapter 1 teachers call up the school to have staff be on the look-out for their own arrival). Other options, such as after-school, Saturday and summer programs, have all been tried before and abandoned because of low attendance.

Three nonpublic school principals reported that relations with the Chapter 1 program were not positive. One is the principal of a school with a new program. They had not been participating for several years and had called to get back into the program. A part-time teacher was found for the 10 eligible students, but the principal was concerned that she has had no contact with the Chapter 1 program (including no meetings with principals), and she doesn't know whether they will be able to participate next year.

The other two principals were from nonparticipating schools. One school is apparently located in an ineligible attendance area (although the policy is not clear). Before coming to this district, she had been principal of another nonpublic school where there were no selection criteria for schools. She reported that she always notes that she wants Chapter 1 services, but has never heard anything

from the district. She estimates the school has 10 eligible students, and she is willing to transport students to public schools for class. The Chapter 1 program in the district appears to be in some flux. The participating principals reported having no problems with the program, while two other nonparticipating principals expressed concern about apparent inconsistencies in school selection.

The third principal concerned about the Chapter 1 program was located outside the school district. The school participates in Chapter 1 with two other districts and has some 17 eligible students for this out-of-district program. She had received no response from the district, and "had been begging for a program for 3 to 4 years...it is like beating a dead horse." The Chapter 1 coordinator said that it was a "comedy of errors," and that he had followed up on the request--with the nonpublic school of the same name located within his district. When the school said they needed no services, he did not pursue the matter. When the out-of-district school called again, he said he had already allocated his staff. He said he may try to get someone there next year. Of the 58 interviews conducted, these were the only concerns raised.

Respondents for this question were the Chapter 1 coordinators and principals of both participating and nonparticipating nonpublic schools. Only 8 nonparticipating nonpublic schools are included, however, since the question was not asked of the 30 with admissions requirements or no low achieving students or those located in ineligible attendance areas of the most urban district.

DO NONPUBLIC SCHOOL PERSONNEL PERCEIVE CHAPTER 1 AS A PROGRAM THAT THEIR STUDENTS SHOULD HAVE EQUAL ACCESS TO?

Previous research indicated that some nonpublic school personnel were "thankful for what they got" from Title I (the precursor to Chapter 1) and expect little from the program (Jung, 1982). Participating principals in this sample see Chapter 1 as a program for their students. Both Archdioceses encourage them to take advantage of federal programs (and all participate in Chapter 2 as well). Principals are knowledgeable about the program in general, although were somewhat sketchy at times about such specific details as what tests are used in selection. In most cases, Chapter 1 has been in the school longer than the principals. Principals rotate among parochial schools about every 6 years, and a number of the schools have had Chapter 1 programs since ESEA was passed. Some have Chapter 1 teachers and aides who have worked ten to fifteen years in the same school. Because of rotating principalships, several respondents discussed Chapter 1 programs in other schools and states. Several have participated in letter writing campaigns when Chapter 1 funding was endangered, and others sponsored 20th birthday celebrations:

> For the 20th anniversary of Chapter 1, our students made posters and wrote to President Reagan. There was a picture and story in the Daily News. It was the first time we were ever in the paper. It was really wonderful for the students. And the poster had good spelling and good construction.

The nonparticipating schools fell into two groups: one set who had never participated in Chapter 1 (these were the schools with admissions requirements, very high tuitions, very few Chapter 1 students and/or were Christian schools) and one set of 6 schools which had at one time participated in Chapter 1 (or whose principal had had Chapter 1 programs in another school). The first group had heard of Chapter 1 (when it was called "the old Title I") but didn't feel the program was for them at all; the second group knew they were entitled to the program but either chose not to participate, had no students below the 50th percentile, or were the two principals who were concerned about the Chapter 1 program.

ARE THERE SUFFICIENT NUMBERS OF ELIGIBLE CHILDREN ATTENDING A NONPUBLIC SCHOOL TO WARRANT PROVIDING CHAPTER 1 SERVICES TO THOSE STUDENTS?

Having too few eligible students within a school was a problem faced more by out-of-district schools than within district schools. The only out-of-district programs funded were in parish schools whose boundaries crossed school district lines. It appears that the other out-of-district schools enroll very few Chapter 1 residents, but no information is available on whether any are low achieving. There was only one instance where an out-of-district school had more than 5 eligible students (see the above discussion).

Some 10 nonparticipating within-district schools have very few Chapter 1 residents and don't participate for multiple reasons. Five of these were examination schools or had no low achieving students, four were Christian schools (two of which had no low achieving students), and 3 were very small schools (total enrollments of less than 70 students) in the most urban district. No additional information was collected on those three schools. From interviews with the Chapter 1 coordinators and with the principals of nonpublic schools, it appears that very few eligible students are missed.

Chapter 1 coordinators reported no fixed minimum number of children needed to provide services to a nonpublic school. From the program application for the most urban district, it appeared there was a fixed minimum of 48 for elementary schools, although during on-site interviews, it became clear there were at least two schools with fewer students (one with 10, another with 24). From conversations with Chapter 1 staff, it appears they spend

considerable energy to provide services to all schools located in eligible attendance areas. In all districts, we found Chapter 1 coordinators committed to serving all eligible children within school district boundaries (or within eligible attendance areas when nonpublic schools were required to meet that criterion), and found they made extra efforts to ensure coverage. Parish schools located outside district boundaries received similar attention.

The smallest number quoted for on-site service was for a high density, small district which stated it would send a teacher if one class of 5 was available. It appears that having 10 students generally warrants someone on site, and the smallest program had 10 students in it. With fewer students, nonpublic schools would be asked to provide transportation for students to attend the program in a nearby Chapter 1 public school. Only one district reported nonpublic schools taking students to a public school for Chapter 1--the rabbi of a Hebrew Academy drove the three eligible students to a nearby public school for a first period of Chapter 1. Principals of participating nonpublic schools were also asked if they had to have to minimum number of students. None knew of a minimum, and none was concerned about having too few students. Concern about numbers centered on how many teachers and aides schools would have each September. In the respondent sample, programs were stable or had expanded slightly over previous years due to increases in the Chapter 1 allocation and declines in public school enrollments.

CONCLUSIONS

If public and nonpublic school participation in Chapter 1 programs are compared using either participants as a percent of total enrollment or participants as a percent of Chapter 1 residents, nonpublic schools have lower participation rates. But these two are both proxy participation rates: the true participation rate would be the number of participants as a percent of low achieving Chapter 1 residents. Summarizing the impact of the factors on the participation rate leads to a good estimate of the true participation rate.

What can be said about Chapter 1 residents who are enrolled in nonparticipating schools? (a) If they are attending nonpublic schools located within the district, they are not likely to be low achieving. Over half of the nonparticipating schools enrolled no low achieving students. (b) Few Chapter 1 residents are enrolled in the 6 nonpublic schools that chose not to participate, and it's not clear whether they are low achieving. (c) An unknown number of Chapter 1 residents attend nonpublic schools located in ineligible attendance areas. All but 10 of these students live in the most urban district. At the moment, some 3,000 students are on waiting lists in the public schools there, while the participating nonpublic schools

interviewed had no waiting lists. Adding the currently ineligible schools to the program would not alter the imbalance in participation rates that favors nonpublic schools. (d) No students are excluded from participation because of uncooperative relationships between the program and nonpublic schools, and nonpublic schools with eligible students are invested in participating. In the two cases where concerns about the program included students not being served, 10 are listed above (under ineligible attendance areas), and the other 17 are counted under out-of-district students below. (e) For Chapter 1 residents attending school outside the district, those served are enrolled in Catholic schools whose parish boundaries overlap with the district. It is not clear whether other out-of-district students are low achieving. According to Chapter 1 coordinators, they are most likely to be high school students enrolled in "exam" high schools. From this analysis, it seems that few Chapter 1 residents enrolled in nonparticipating schools would be eligible for Chapter 1 services.

What can be said about Chapter 1 residents enrolled in participating schools? Some 26 of the 28 nonpublic school principals interviewed said there were no waiting lists for Chapter 1 in their schools. The other two principals thought they would accommodate 20 students and "a few," respectively. One could argue then that all eligible students within the participating nonpublic schools are served, provided that the same criteria are used in public and nonpublic schools for initial selection. Different achievement tests are used in these districts, but the use of multiple criteria more likely expands the selection pool and mutes the effects of bias in different tests.

Following this analysis, one could posit that a more accurate proxy measure of the true participation rate would be to use the number of participants as a percent of low achieving Chapter 1 attendance areas residents in participating schools. Table 11 presents four different definitions of participation rates--participants as percent of total enrollment, as percent of Chapter 1 area residents, as percent of Chapter 1 residents in participating schools and as a percent of low achieving Chapter 1 residents in participating schools. While the first two show a discrepancy favoring public school participation in Chapter 1, the last two indicate that low achieving Chapter 1 residents in nonpublic schools are more likely to be served than their public school counterparts. For the most urban district, eligible Chapter 1 residents are much more likely to be served in nonpublic than in public schools.

NOTES

Jung, Richard. Nonpublic School Students in Title I ESEA Programs: A Question of "Equal" Services. McLean, VA: Advanced Technology, Inc, 1982.

TABLE 11. CHAPTER 1 PARTICIPATION RATES FOR PUBLIC AND NONPUBLIC SCHOOL STUDENTS: REFINING THE DENOMINATOR

MASSACHUSETTS 39 LARGER DISTRICTS

DENOMINATOR	PUBLIC SCHOOL PARTICIPANTS DIVIDED BY DENOMINATOR	NONPUBLIC SCHOOL PARTICIPANTS DIVIDED BY DENOMINATOR
TOTAL ENROLLMENT	14%	9%
CHAPTER 1 ATTENDANCE AREA RESIDENTS	23%	19%
CHAPTER 1 ATTENDANCE AREA RESIDENTS IN PARTICIPATING SCHOOLS	23%	27%
ELIGIBLE CHAPTER 1 ATTENDANCE AREA RESIDENTS IN PARTICIPATING SCHOOLS (10 Selected Districts)	~90-~95%*	100%

* This is the estimated coverage for elementary schools; the figures would be somewhat less if junior and senior high school waiting lists were included. Please see the text on pages 12-13 for details.

APPENDIX A

Appendix A is a methodological appendix, containing descriptive information on statistics available at the state level, the listing of the 39 districts included in this study, and the interview guides used. Interviews with State Department personnel took place in December, January, April and May of 1985, while interviews with district Chapter 1 coordinators and with principals of nonpublic schools were conducted in April, May and June of 1985. The review of program applications was conducted in March of 1985.

DATA SOURCES

Massachusetts collects a considerable amount of statistics on public and nonpublic schools through its Chapter 1 program application and its annual survey of all elementary and secondary schools in Massachusetts (published as Massachusetts Schools). On the Chapter 1 program application form, each district provides the district wide poverty percentage; the names and grade levels of each school in the district, as well as the percent of low income students enrolled; the number of public and nonpublic school children that reside in each Chapter 1 attendance area (although the number of nonpublic school children is not always provided); the estimated number of public and nonpublic children to be served in Chapter 1 programs by school and by grade level; the Chapter 1 propram offerings by grade level for public and nonpublic school students; the names of all nonpublic schools Chapter 1 attendance area students attend (although the accuracy of this varies from application to application), along with their total enrollment and the number of Chapter 1 attendance area residents enrolled, and the estimated number of participating Chapter 1 students (if any). The statistics to be used in this study are as of January 1, 1984, with estimated Chapter 1 participants for the school year 1984-85.

Massachusetts Schools (1983-84) lists all public schools for each district by name with their grade spans and their total enrollment by sex. Name, address and telephone number of the principal are also provided. Nonpublic schools are also listed alphabetically by city, with the same information provided.

The program applications and Massachusetts Schools provided the descriptive statistics to (1) characterize nonpublic schools and their participation in Chapter 1, (2) help select districts for more intensive study, and (3) guide interview construction.